

## Yasuji MORIMOTO:\* Notes on rust fungi of Japan

## 森本泰二\*: 日本産銹菌雜記

1. *Puccinia punctata* Link (Fig. 1)

Hab. III. On *Galium verum* var. *lacteum* (*Kawara-matsuba*); Hara-mura, Suagun, Nagano Pref. (Nov. 2, 1958, Y. Morimoto.)

Teleutospores are variable in length and width according to different habitats. The size of the teleutospores and its investigators from different districts are as follows:

Cunningham	: materials from Newzealand	35-44×15-22 $\mu$
Arthur	: materials from North America	37-56×16-26 $\mu$
Ito	: materials from Japan	35-58×19-28 $\mu$
Fischer	: materials from Europe	77-82×18-24 $\mu$
Morimoto	: materials from Hara-mura, Japan	44-71×16-26 $\mu$

This fungus is closely related to Fischer's one parasitic on *Galium Mollugo* and *Asperula odorata* (*Kurumaba-so*) in having attenuated inferior cell.

2. *Puccinia moriokaensis* S. Ito (Fig. 2.)

Hab. III. On *Phalaris arundinacea* var. *gemina* (*Kusayoshi*) Tsutsuga-mura, Yamagata-gun, Hiroshima Pref. (Nov. 24, 1957, Y. Morimoto).

*Phalaris arundinacea* is a new host plant for this fungus.

3. *Puccinia hibayamensis* Y. Morimoto, nov. spec. (Fig. 3, 4.)

Soris hypophyllis, sparsis, aggregatis vel seriatim dispositis, minutis, rotundatis vel ellipsoideis; primo epidermide tectis, dein nudis, pulvinatis, compactis, atro-brunneis vel atris; amphisporsis obovatis, oblongis vel piriformibus, saepe angulatis, apice rotundatis, interdum applanatis, basi plerumque leniter attenuatis, levibus, flavo-brunneis vel castaneo-brunneis, 27-55 (raro 60)×17-27  $\mu$ ; poris germinationis 2 vel 4, plerumque 3 aequatorialibus instructis; episporia 2-4  $\mu$  crasso, pedicello hyalino, usque 22-55  $\mu$  longo. Teleutosporis immixtis, ellipsoideis, lanceolatis, vel longe clavatis, apice rotundatis, vel conico-attenuatis, valde incrassatis (8-17  $\mu$ ), medio leniter constrictis, basi attenuatis, pallide flavo-brunneis, 38-77 (raro 85)×11-22  $\mu$ ; pedicello pallide flavo-brunneis, persistenti, usque 20-72  $\mu$  longo.

\* Hiroshima Prefectural Yoshida High School, Yoshida-cho, Hiroshima Prefecture. 広島県吉田高等学校。広島県高田郡吉田町。

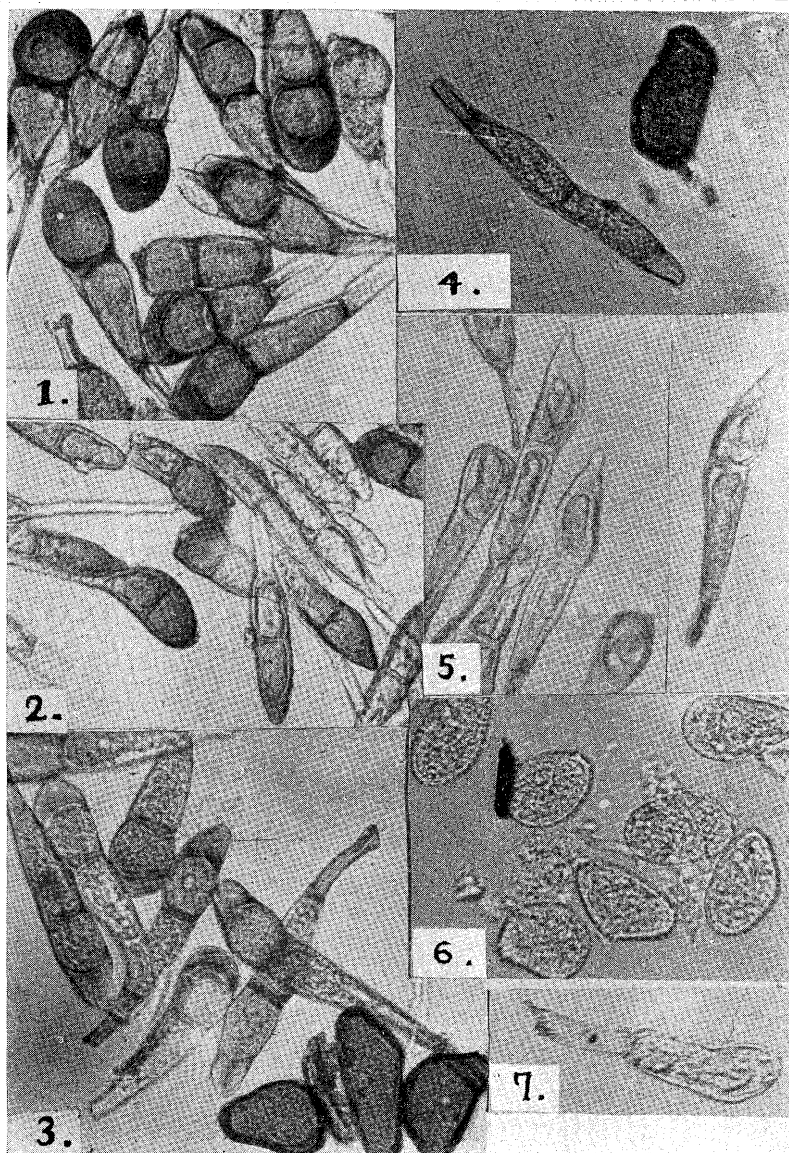


Fig. 1-7. ( $\times 400$ ) 1. Teleutospores of *Puccinia punctata* Link on *Galium verum* var. *lactum*. 2. Teleutospores of *Puccinia moriokaensis* S. Ito on *Phalaris arundinacea*. 3, 4. Teleutospores and amphispores of *Puccinia hibayamensis* Y. Morimoto on *Carex multiflora*. 5. Teleutospores of *Puccinia iwakuniensis* Y. Morimoto on *Liriope graminifolia*. 6. Uredospores of *Puccinia iwakuniensis* Y. Morimoto on *Liriope graminifolia*. 7. Mesospores of *Puccinia iwakuniensis* Y. Morimoto on *Liriope graminifolia*.

Hab. III. On *Carex multiflora* (Miyama-kan-suge). Mt. Hibayama, Hiba-gun, Hiroshima Pref. (Dec. 15, 1957, Y. Morimoto, type!)

The present species is closely related to *Puccinia hakodatensis* Hiratsuka, from which it distinctly differs by its longer teleutospores.

**4. *Puccinia iwakuniensis*** Y. Morimoto, nov. spec. (Fig. 5, 6, 7)

Soris uredosporiferis hypophyllis, maculo bullio, minutis, rotundatis, ca. 0.3 mm diam., laxe circulo aggregatis, in areis discoloribus castaneo-brunneis insidentibus, epidermide tectis; uredosporis obovatis, oblongis, subglobosis,  $22-44 \times 16-26 \mu$ , episporio hyalino vel dilute flavo-brunneolis  $2-3 \mu$  crasso, echinulato. Teleutosporeis hypophyllis, maculo bullio, minutis, 0.2-1.0 mm laxe aggregatis, rotundatis, oblongis, in areis discoloribus castaneo-brunneis insidentibus, diu epidermide tectis; brunneolis. Teleutosporis oblongis, cylindraco-clavatis,  $44-77$  (raro 88)  $\times 13-22 \mu$ , basi leniter attenuatis, medio modice constrictis, apice rotundatis vel conico-attenuatis, valde usque ( $7-17 \mu$ ) incrassatis, episporio dilute flavo-brunneolis, mesosporis immixtis, pedicello usque  $22-77 \mu$  longo, persistenti.

Hab. II, III. On *Liriope graminifolia* (Yaburan). Iwakuni, Kuga-gun, Yamaguchi Pref.; (April 16, 1939 & Oct. 16, 1939, Y. Morimoto, type!)

**5. *Puccinia akiyoshidanensis*** Y. Morimoto nov. spec. (Fig. 8, 9, 10.)

Soris teleutosporeis amphigenis, praeapices hypophyllis, sparsis, minutis, 0.2-0.5 mm diam., rotundatis vel ellipsoideis in epiphyllis; sparsis vel dense aggregatis, mediocribus 0.5-1.0 mm diam., rotundatis vel ellipsoideis in hypophyllis; nudis, pulvinatis, compactis, atris. Teleutosporis oblongis, ellipsoideis vel longe-clavatis,  $33-70$  (raro 77-82)  $\times 10-22 \mu$  (raro 24-26), apice attenuatis, raro rotundatis, valde incrassatis ( $3-11 \mu$ ), medio vix constrictis vel leniter constrictis, basi leniter attenuatis vel rotundatis, membrana castaneo-brunneis vel dilute flavo-brunneis, lebivus, pedicello dilute flavo-brunneis  $66-130 \mu$  (ad  $250 \mu$ ) longo, mesosporis immixtis.

Hab. III. On *Phragmites longivalvis* (Yoshi).

Tsutsuga-mura, Yamagata-gun, Hiroshima Pref. (Nov. 24, 1957, Y. Morimoto); Kamiirie-Yoshida-cho, (Dec. 5, 1957, Y. Morimoto, type!), Miyano-jo, Yoshida-cho, Hiroshima Pref. (Nov. 15, 1958, Y. Morimoto.)

**6. *Puccinia takikibicola*** Y. Morimoto, nov. spec. (Fig. 11, 12, 13.)

Soris uredosporiferis amphigenis, sparsis, minutis, ellipsoideis, flavidis, diu epidermide tectis, dein fissa cinctis, pulverulentis; paraphysibus lenearibus  $22-55 \mu$  longis, lebivus, dilute flavidis vel hyalino intermixtee; uredosporis globosis, subglobosis vel ovatis,  $20-33 \times 14-27 \mu$ , episporio  $1.2-2 \mu$  crasso, echinulatis. Soris teleutosporeis

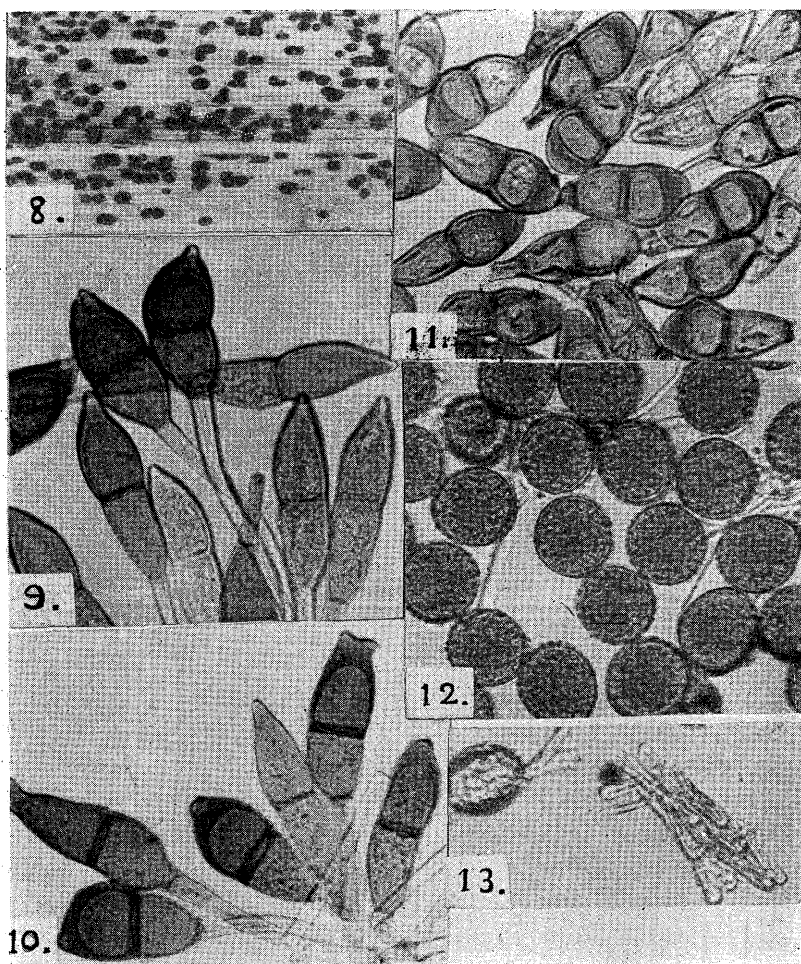


Fig. 8-13. (8×3, 9-13×400) 8. Teleutosorus of *Puccinia akiyoshidanensis* Y. Morimoto on *Phragmites longivalvis*. 9, 10. Teleutospores of *Puccinia akiyoshidanensis* Y. Morimoto on *Phragmites longivalvis*. 11. Teleutospores of *Puccinia takikibicola* Y. Morimoto on *Phanerosperma globosum*. 12. Uredospores of *Puccinia takikibicola* Y. Morimoto on *Phanerosperma globosum*. 13. Paraphyses of *Puccinia takikibicola* Y. Morimoto on *Phanerosperma globosum*.

amphigenis, sparsis laxe aggregatis, minutis 0.2-0.3 mm diam., rotundatis vel ellipsoideis, diutius epidermide tectis dein fissa cinctis, vel semitectis, pulvinatis atris; teleutosporis ellipsoideis  $27-52 \times 12-22 \mu$ , apex rotundatis, interdum conico-attenuatis, valde incrassatis ( $6-11 \mu$ ), medio leniter constrictis, basi rotundatis vel leniter atte-

nuatis, membrana flavo-brunneis vel dilute flavo-brunneis levibus, pedicello dilute flavo-brunneis 16-38  $\mu$  longo, persistenti.

Hab. II. III. On *Phanerosperma globosum* (Takikibi). Tsutsuga-mura, Yamagata-gun, Hiroshima Pref. (Nov. 24, 1957; Oct. 15, 1958, Y. Morimoto type!); Yawatahama-shi, Ehime Pref. (July 17, 1939, T. Yoshinaga).

#### 7. *Puccinia Stipae-sibiricae* S. Ito.

Hab. III. On *Stipa effusa* = *Stipa sibirica* (Hane-gaya). Shosen-Kyo, Yamaguchi Pref. (Nov. 1, 1958, Y. Morimoto).

This teleutosorus is parasitic not on epiphyll but on hypophyll.

This fungus is new to Honshu!

The type specimens of the new species mentioned above are all deposited in the Morimoto Herbarium, Yoshida-cho, Takata-gun, Hiroshima Pref., Japan.

The writer wishes to express his heartiest thanks to Dr. S. Hatusima, Kagoshima University for the identification of the host plants, *Carex multiflora*, *Phalaris arundinacea*, and *Stipa effusa*.

#### ○*Elsholtzia cristata* Willd. var. *minima* Nakai の出典 (檜山庫三)

Kozo HIYAMA: The origin of *Elsholtzia cristata* Willd. var. *minima* Nakai.

最近北川政夫博士が濟州島産のヒメナギナタコウジュの学名を *Elsholtzia pseudo-cristata* Lév. & Van. forma *minima* (Nakai) Kitag., stat. nov. (植研 34: 3. 1959) とされた際に異名の一つとして *E. cristata* var. *minima* Nakai を引用しその出典を植雑 35: 172. 1921 とされたが、そこには *E. cristata* var. *ramosa* Nakai forma *minima* (ut *Elscholtzia*) とあるから、これは何かの手違いによるものではないかと思われる。*E. cristata* var. *minima* Nakai は森為三: 朝鮮植物名彙 301. 1922 (ut *Elscholtzia*) に発表されたものであってこれは裸名であり、また Handel-Mazzetti (1939) もこれを異名として引用しているにすぎないから、この名はおそらく正式の発表を見ずにしまったのではあるまいか。